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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,206	09/24/2003	Mahesh R. Junnarkar	ITL.0995 (P16440)	2629
21906	7590	08/25/2006	EXAMINER	
TROP PRUNER & HU, PC 1616 S. VOSS ROAD, SUITE 750 HOUSTON, TX 77057-2631			CHIEM, DINH D	
			ART UNIT	PAPER NUMBER
			2883	
DATE MAILED: 08/25/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/669,206

Applicant(s)

JUNNARKAR ET AL.

Examiner

Erin D. Chiem

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 5/22/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

In view of the Pre-Appeal Conference Request filed on May 22, 2006, and the Pre-Appeal Conference Decision PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

  
Frank G. Font  
Supervisory Patent Examiner  
Technology Center 2800

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 9-16, 18-19, and 22-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Thompson et al. (US 2002/0102052 A1 “Thompson” hereafter).

Thompson discloses a planar waveguide dispersion compensator comprising an arrayed waveguide grating (14) having an array of waveguides (16 (a-f)); and arranging a plurality of heaters to provide a temperature gradient across said array of waveguides (Para [0105]). The arrayed waveguide grating is formed as a planar lightwave circuit (Para [0003]) provided on a substrate (116). The heaters are formed on the opposite side of the circuit (Para [0108]) and the heaters have generally the same configuration as the waveguides (See Fig. 5c). The heaters are selectively actuatable and Thompson discloses such means via thermally adjusting the “strip lens” thus lengthening the optical path (Para [0092]-[0100]).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7, 17, and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson in view of MacPherson et al. (US Patent 6,096,566 “MacPherson” hereafter) and (US Patent 5,612,968 “Zah” hereafter).

Thompson discloses the invention of claims 1 and 6 as applied above. However, Thompson does not disclose the fuses are laser actuatable.

MacPherson teaches an inter-conductive layer fuse for integrated circuits formed on a silicon substrate. MacPherson teaches in an embodiment of the invention is to utilize laser-configurable fuses wherein a laser beam blows selected fuses to sever the chosen electrical connections (col.2 lines 64 – col. 3. line 11). However, MacPherson lacks the teaching of the application used in optical devices.

Zah teaches a redundant multi-wavelength laser arrays wherein the optical waveguides (Fig. 2; 26), typically semiconductor waveguides on board the chip 20 (col. 4, line 24) wherein the selective wavelength is dependent on the connection and non-connection by burning a fuse.

Since Thompson, Zah, and MacPherson are all from the same field of endeavor, the purpose disclosed by Zah and MacPherson would have been recognized in the pertinent art of Thompson.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to recognize MacPherson’s teaching of blowing laser fuses on semiconductor wafers and combine the with the teaching of Zah’s wavelength selection by selectively connecting the transmission paths through the mean of burning or blowing a fuse and extrapolate the teachings to employ laser fuses to select or “actuate” the desire heater in a plurality of heaters. **The motivation** for employing laser fuses as a mean of actuation is

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desirable for laser's accuracy. The level of accuracy that laser can be provided when selectively disconnect a fuse is highly desirable in the art of micro-electronics especially when the entire circuitry is integrated on a chip such as the ones taught by Thompson, Zah, and MacPherson.

***Response to Arguments***

Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

***Contact Information***

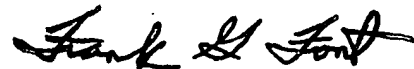
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erin D. Chiem whose telephone number is (571) 272-3102. The examiner can normally be reached on Monday - Thursday 9AM - 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on (571) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Erin D Chiem  
Examiner  
Art Unit 2883



Frank G. Font  
Supervisory Patent Examiner  
Technology Center 2800